



CERTIFICATE NUMBER	22-2309990-PDA
EFFECTIVE DATE	26-Oct-2022
EXPIRY DATE	25-Oct-2027
ABS TECHNICAL OFFICE	Houston ESD - Offshore Equipment

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

DIALIGHT CORPORATION

located at

1501 RT. 34 SOUTH, , FARMINGDALE, NJ, United States, 07727

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: **Lighting Fixtures, LED**
Model: **ALx**
Endorsements:
Tier: **2 - PDA Issued**

This Product Design Assessment (PDA) Certificate remains valid until 25/Oct/2027 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Sohail A. Mohammed

Sohail Ahmed Mohammed, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

DIALIGHT CORPORATION

1501 RT. 34 SOUTH

FARMINGDALE NJ

United States 07727

Telephone: 732-919-3119

Fax: 732-751-3190

Email: jsingh@dialight.com

Web: dialight.com

Tier: 2 - PDA Issued

Product: Lighting Fixtures, LED

Model: ALx

Endorsements:

Intended Service:

Marine and Offshore Application

Description:

Vigilant Series LED Area Light suitable for wet locations.

Rating:

Operating Voltage Standard: 100 - 277 VAC, 50/60 Hz

Power Consumption: 71 Watts;

Operating Temperature: -40°C to +65°C, 120-250VDC

Ingress protection: IP66, IP67; IPX9; NEMA 4X

Hazardous locations:

Class I, Division 1, Group B, C, D locations

Class I, Division 2, Group A, B, C, D locations

Class II, Division 1, Group E, F, G locations

Class II, Division 2, Group F, G locations

Class III, Division 1 & 2 locations

See attached "pdf" for details.

Service Restriction:

1. Unit Certification is not required for this product.

2. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. Ref Doc_1, UL1598/A – Intertek Report # 101610021CRT-001, Revision: 02, Pages: 1

Drawing No. Ref Doc_10, Dialight_LED_AreaLight_SpecSheet_UL_April2022_04082022, Revision: 01, Pages: 1

Drawing No. Ref Doc_2, UL1598/A – Intertek Report # 102797734CRT-001, Revision: 02, Pages: 1

Drawing No. Ref Doc_3, UL844 CID1 – Intertek Report # 102797734CRT-003, Revision: 02, Pages: 1

Drawing No. Ref Doc_4, UL844 CID2 – Intertek Report # 102797734CRT-004, Revision: 02, Pages: 1

Drawing No. Ref Doc_5, CB Scheme – Intertek Report # 103946961CRT-001, Revision: 02, Pages: 1

Drawing No. Ref Doc_6, ATM for Report # 101610021CRT-001, Revision: 02, Pages: 1

Drawing No. Ref Doc_7, ATM for Report # 102797734CRT-001, Revision: 02, Pages: 1

Drawing No. Ref Doc_8, ATM for Report Report # 102797734CRT-003, Revision: 02, Pages: 1

Drawing No. Ref Doc_9, ATM for Report # 102797734CRT-004, Revision: 02, Pages: 1

Terms of Validity:

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STANDARDS

ABS Rules:

Rules for Conditions of Classification, Part 1-1-4/7.7, 1-1-A3, 1-1-A4 which covers the following:

2022 Marine Vessel Rules: 4-8-3/1.11, 3.1, 13.1 & Table 2, 4-8-4/1.5 & 27.5

2022 Mobile Offshore Units Rules: 4-3-1/15, 4-3-3/3.17 & 9.3

National:

NA

International:

UL 844, 13th Ed., June 20, 2012, "Standard for Luminaires for Use in Hazardous (Classified) Locations"

UL1598, 5th Ed. March 26, 2021, "Luminaires"

UL1598A, 1st Ed., 2000, "Supplemental Requirements For Luminaires For Installation On Marine Vessels"

IEC 60079-0:2017, "Series Explosive Atmosphere Standards"

IEC 60079-18:2014 "Explosive atmospheres - Part 18: Equipment protection by encapsulation 'm'"

CSA C22.2 No.137-M1981 (R2014) "Electric Luminaires for Use in Hazardous Locations"

Government:

NA

EUMED:

NA

OTHERS:

NA